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Mini-presentation for SPPI on:

**NACE 55.1 Hotels and similar  
accommodation in Sweden**

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## 1. Definition of the sector

The accommodation and food services sector is comprised of division 55 and 56 according to NACE Rev. 2. In this sector Sweden only covers 55.1 (Hotels and similar accommodation) in SPPI. Sweden uses CPI indexes for 55.3 (Camping grounds, recreational vehicle parks and trailer parks) and 56 (Food and beverage service activities) combined with the SPPI for 55.1 to produce an index for the accommodation and food services sector. This paper focuses on the part that is produced within the SPPI, i.e. division 55.1

In the Swedish classification SNI 2007 division 55.1 contains three different subgroups; hotels with restaurants, operation of conference facilities and hotels without restaurants.

**Table 1. Hotels and similar accommodation according to NACE Rev. 2 and SNI 2007**

<b>NACE Rev. 2</b>	<b>55.1</b>	<b>Hotels and similar accommodation</b>	<b>Turnover</b>
<b>SNI 2007</b>	<b>55.1</b>	<b>Hotels and similar accommodation</b>	<b>27.1 MSEK</b>
	55.101	Hotels with restaurants	21.1 MSEK
	55.102	Operation of conference facilities	3.4 MSEK
	55.103	Hotels without restaurants	2.6 MSEK

Table 1 show that the main part of the turnover in the industry is in the subgroup of hotels with restaurants. The turnover share for operation of conference facilities seems fairly low, but is perfectly natural as most conference facilities are integrated with a hotel and so forth falls within the category of hotels with restaurants. Hotels without restaurants are substantially less common than hotels with restaurants. The sample is drawn on division 55.1 and contains businesses in all three subgroups.

## 2. The hotel survey in the Swedish SPPI

The hotel survey was the very first SPPI survey in Sweden. It started back in 1995, but was not published originally, and was only delivered to the National Accounts. In 1999 a price index for hotel services was published for the first time. At this time the indexes from 1995 to 1998 were all published.

40 hotels were in the sample from the beginning and the categories were the following:

- A. Single occupancy, standard room, weekdays
- B. Double occupancy, standard room, weekends
- C. Conference day, single occupancy, weekdays
- D. Dinner à la carte (including first course, main course, salad and drink)

The prices collected were list prices for the four categories above. Prices were collected four times a year, for the months, March, June, September and December. Categories A to C were weighted together to compose a total index for hotels.

### 3. The 2001 review

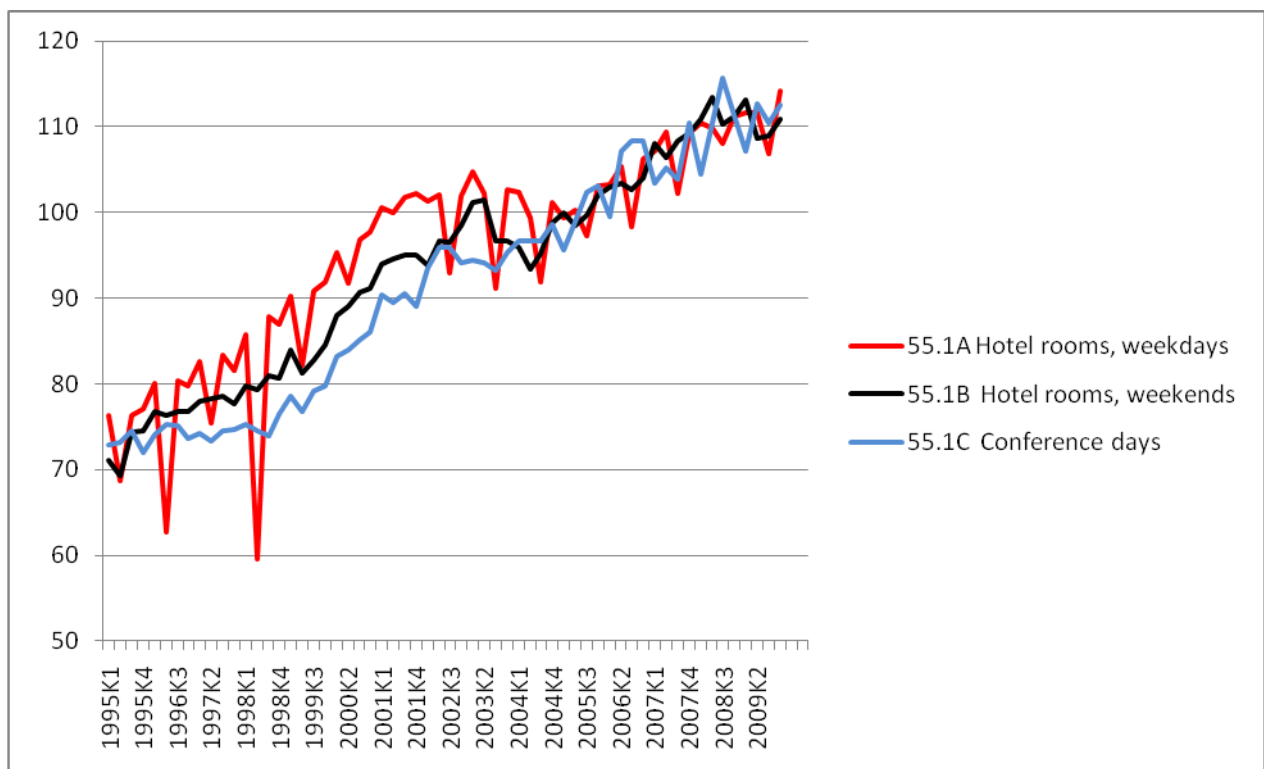
A review of the hotel survey was done in 2001. The most important outcome of the review was a change from list prices to average invoiced prices per occupied room for each month. Reported prices no longer included either Value-Added Tax (VAT) or breakfast either.

Category D was dropped from the questionnaire, as it was not a part of the classification for hotel activities. Three categories remained and were stipulated as the following:

- A. Average invoiced price per occupied room, Monday-Thursday (weekdays)
- B. Average invoiced price per occupied room, Friday-Sunday (weekends)
- C. Conference day with full board, single occupancy, Monday-Thursday

Price collection was still only done four times a year but hotels now had to report average monthly prices. Statistics Sweden then calculated quarterly averages and published indexes, based on the changes made, quarterly from the first quarter of 2002.

**Chart 1. SPPI for Hotels, 1995-2010 (2005 = 100)**



As can be seen by chart 1 above, the changes made after the review had large impact on the development of the indexes. The three categories are weighted together to form a total index for hotels. This is not shown in the chart.

Category A, weekdays, is interpreted as business guests by the National Accounts. That is, we assume that there are only business guests, and so forth no private guests, staying at hotels on weekdays. Category B is treated in the same way. It is assumed that there are no business guests staying at hotels over the weekend, thus only private guests. This is of course not the case in reality but it is used as a proxy by the National Accounts, to distinguish between

business and private guests and to make the comparison between the CPI and the SPPI indexes. CPI includes only private guests.

#### **4. A review in 2010**

Even though the hotel survey has run smoothly recent years a review was decided to be done in 2010. The main reasons for this were the long time since the last review and that large price fluctuations within hotels were common.

There were also concerns about the sample process and the implementation of the sample that needed to be examined further.

Other things to look into were if the categories that were decided upon in the 2001 review still are the most relevant and if the average invoiced price is the best way of capturing real price developments.

As the Swedish National Accounts is the primary user of the SPPI index for hotels, their opinion is important if any changes in the survey is considered. The main source for statistics for the hotel industry is the Accommodation Statistics. SHR, The Swedish Hotel and Restaurant Association, that represents about 5 500 workplaces, e.g. uses the Accommodation Statistics to present statistics on their website.

#### **5. Results from the review**

Statistics Sweden performs three different surveys that all collect monthly prices from hotels in various ways. Those are CPI, SPPI and the Accommodation Statistics. One of the first things in the review was to look at if there was any way to merge these surveys, or use information gathered in any of them for the SPPI.

CPI and SPPI differ in that way that CPI includes taxes (VAT) and measures point-in-time prices. CPI collects monthly prices and they are compiled well in time before SPPI publishes. Only private guests are included in CPI and as SPPI have a business to all perspective, the CPI index for hotels is not a good replacement for SPPI.

The Accommodation Statistics is a monthly census with around 2000 hotels. As far as prices are concerned they collect the hotels total accommodation revenue and number of occupied rooms, which divided by each other, gives the average revenue per occupied room, also called Average Room Rate (ARR). ARR is the same as the average invoiced price per occupied room, which is what SPPI collects.

The Accommodation Statistics collects number of occupied rooms for business, private and conference guests. This information is used for weighting the three categories in SPPI. They are not exactly the same but are used as approximates. However, the Accommodation Statistics do not collect accommodation revenue for these three groups. If they did the SPPI survey would not be needed, but there is no possibility for them to collect this information.

Thus the SPPI survey brings something that the other surveys do not, and it is therefore a need to continue producing it. The other surveys can though be useful as markers. The CPI index

ought to develop similar to the SPPI for weekends, and the total SPPI index should have a similar development to that of the Accommodation Statistics.

After talking to business representatives and respondents the most important price determining factors are type of guest, rate of occupancy and if there is an event in town or close by that would increase the demand for hotel rooms. Some hotels also refer to the economic downturn and an increased competition between hotels as a reason for lower prices over the recent year or two.

Business guests usually pay a higher price than private guests, which affects the price levels on weekdays and weekends, but not necessarily the price developments of the two. As the rate of occupancy usually is lower on weekends, and especially around holidays, the price also drops. Holidays such as Christmas and Easter have a big impact on the average monthly prices. Business guests are fewer in the summer time which also affects the price downwards for these months. Conference guests are also substantially less common during the summer, while September is the month with the most conferences, and that makes for higher prices.

A lot of hotels point to the fact that prices for hotel rooms nowadays are almost like spot prices. The price for the exact same room can differ during just one day. The large price fluctuations that we see, sometimes up to 50% from one month to the next are being confirmed as reasonable.

The Average Room Rate appears to be the best pricing method for hotel rooms. A potential problem could be that single and double occupancy are mixed. Most hotels claim that the mix is constant over time and should then not affect the price development. It is not rare that rooms with two beds are rented to just one person, for the price of single occupancy. Splitting up price collection into single and double occupancy does not necessarily solve this problem.

## **6. Implementations to be made**

As type of guest is the most important price determining factor, we should ask for it. Weekends and holidays do affect the price but mostly through the fact that private guests dominate the occupancy on those days. From 2011 the categories will be defined as:

- A. Average invoiced price per occupied room, business guests
- B. Average invoiced price per occupied room, private guests
- C. Conference day with full board, single occupancy

In our discussions with hotels most of them said that they can just as well report business and private guests instead of weekdays and weekends. Some said that they would prefer it as it would not need any manual calculations.

As mentioned earlier, the National Accounts, already interprets weekdays as business guests and weekends as private guests, so for them the new categories is an improvement. The index will now also be of more interest to business users.

When the SPPI survey for hotels started the obvious thing was to include the sample with the CPI sample, as it was the only survey at the Price Unit to have a PPS sample at the time. The CPI and SPPI sample has therefore been joined since the beginning, with CPI using 25 of the 40 hotels that is in the SPPI sample. Nowadays there is no reason why the samples should be

joined and they have therefore been separated from 2011. A cut off limit of 10 employees has also been introduced in the SPPI sample to reduce the response burden for the smallest hotels.

The hotel survey is the only SPPI survey to collect monthly prices. Since SPPI is published quarterly there is no need for such detailed data. From 2011 an average quarterly invoiced price will be requested.

We hope that the changes made in the survey will improve the index and make it more attractive to our users, and also lower the response burden.